

# ABSTRACT

5 In the manufacture of a photomask blank, a seed layer  
of a chromium material containing oxygen, nitrogen and/or  
carbon is formed on a transparent substrate before a light-  
shielding film and an antireflective film are deposited  
thereon. Any film on the seed layer builds up in accordance  
with fine granular growth, and so the resulting photomask  
10 blank has an improved surface roughness, which enables high-  
sensitivity detection in the process of defect inspection  
and circuit pattern inspection. By lithographically  
patterning the photomask blank, a photomask is fabricated.

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